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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,371	05/23/2006	Anthony Bonnet	FR-AM 1991 NP	2076

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ARKEMA INC.
PATENT DEPARTMENT - 26TH FLOOR
2000 MARKET STREET
PHILADELPHIA, PA 19103-3222

EXAMINER

MCCULLEY, MEGAN CASSANDRA

ART UNIT	PAPER NUMBER
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1796

MAIL DATE	DELIVERY MODE
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04/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,371	Applicant(s) BONNET ET AL.	
	Examiner Megan McCulley	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 18-23 and 28-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-14, 18-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 28-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/22/2009; 8/23/2006</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
It is not accompanied by a statement that the translation is accurate. See MPEP 602.06 and 37 CFR 1.69.

Election/Restrictions

Claims 1-14 and 18-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on January 22, 2009.

Applicant's election without traverse of Group II in the reply filed on January 22, 2009 is acknowledged. The pending claims are 1-14, 18-23, and 28-46.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 35 recites the limitation "the poly(alkyl acrylate)" in the first line. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further consideration, it is taken to mean that claim 35 depends on claim 34.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 28-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Court et al. (WO 01/92415) in view of Ohashi et al. (JP 08-085179). The English language equivalent (U.S. Pat. 6,894,113) of the WIPO document is used for the citations below. The English machine translation of the Japanese document is used for the citations below.

Regarding claims 28, 29, 43, 44, 46: Court et al. teaches a composition comprising 99-65% of a thermoset resin and 1-35% of an impact modifier/rheology controlling agent, which overlaps the claimed ranges (col. 6 lines 35-40), the modifier comprising at least one block copolymer selected from S-B-M, B-M, M-B-M wherein the blocks are connected to each other via an intermediate molecule connected to the blocks via covalent bonds, M is at least 50% methyl methacrylate, B is incompatible with the thermoset resin and with the M block and its glass transition temperature is less than the operating temperature of the thermoset material, and S is incompatible with the thermoset resin and the B block and has a glass transition temperature greater than the glass transition temperature of the B blocks (abstract).

Court et al. does not teach the process of making a filament, weaving or knitting with fibers and compressing under heat. However, Ohashi et al. teaches a process of supplying a thermoset resin fiber, weaving the thermosetting resin fibers with glass fibers, and heating while pressing (abstract). Court et al. and Ohashi et al. are analogous art since they are both concerned with the same field of endeavor, namely thermoset materials with high impact resistance. At the time of the invention a person having ordinary skill in the art would have found it obvious to combine the process steps of Ohashi et al. with the composition of Court et al. and would have been motivated to do so for such desirable properties as improved dimensional stability and fixed rigidity.

Regarding claim 30: While Court et al. does not teach at least 75% syndiotactic PMMA in the M blocks, 72% is disclosed (col. 9 lines 5-10). A prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but

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are close enough that one skilled in the art would have expected them to have the same properties (see MPEP 2144.05 I.).

Regarding claim 31: Court et al. teach reactive monomers in the M block such as glycidyl methacrylate, tert-butyl methacrylate and acrylic acid (col. 5 lines 1-20).

Regarding claims 32 and 33: Court et al. teaches the Tg of the B block is less than 0 or less than -40 °C (col. 5 lines 20-21).

Regarding claims 34-37: Court et al. teaches that B can be alkyl (meth) acrylates such as from monomers of butyl acrylate or ethylhexyl acrylate or polydienes such as 1,4-polybutadiene which is hydrogenated (col. 5 lines 20-45).

Regarding claims 38 and 39: Court et al. teaches the Tg of S is greater than 23 or 50 °C (col. 6 lines 10-15).

Regarding claim 40: Court et al. teaches the S block is polystyrene (abstract).

Regarding claims 41 and 42: Court et al. teaches the molecular weight is 10,000-500,000 or 20,000-200,000 (col. 5 lines 45-50).

Regarding claim 45: Court et al. teaches an epoxy resin and a hardener (abstract).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Megan McCulley whose telephone number is (571)270-3292. The examiner can normally be reached on Monday - Friday 7:30-5:00 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James J. Seidleck/
Supervisory Patent Examiner, Art Unit 1796

/M. M./
Examiner, Art Unit 1796